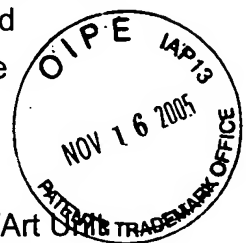


IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Number : 10/519,142 ✓ Confirmation No. 3201
Applicant(s) : Henrik JENSEN et al.
Filed : December 27, 2004
Title : METHOD FOR PRODUCTION OF A PRODUCT HAVING
SUB-MICRON PRIMARY PARTICLE SIZE, PRODUCT
PRODUCED BY THE METHOD AND APPARATUS FOR USE
OF THE METHOD
TC/Art Unit : TBA
Examiner: : TBA
Docket No. : 55320.000401
Customer No. : 21967



MAIL STOP AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with 37 C.F.R. §§ 1.97 and 1.98, and in compliance with the duty of disclosure set forth in 37 C.F.R. § 1.56, applicants submit attached Form PTO-SB/08A for consideration and request the documents cited therein be made of record by the U.S. Patent and Trademark Office in the above-captioned application.

Applicants respectfully point out that the submission of the listed documents in this Information Disclosure Statement is not an admission that they are prior art or that they are material to patentability of any claims of the application. Also, the submission of this Information Disclosure Statement is not an indication that a search has been made by Applicants.

For the convenience of the Examiner in considering the cited documents, a copy of each of the cited documents is enclosed with this communication. In considering the cited documents, it may be noted by the Examiner that certain of the documents may contain markings, underlinings, and/or other notations. These markings, underlinings, and/or other notations are not to be construed as drawing the

Examiner's attention either to selected parts or away from other parts of the cited documents. Any such markings were either present on the copies of the cited documents obtained by the associated individuals, or were made thereon during the study of the documents by the associated individuals.

Consideration of the foregoing plus the prompt return of a copy of the enclosed Form SB/08A with the Examiner's initials in the left column in accordance with MPEP 609 are respectfully requested.

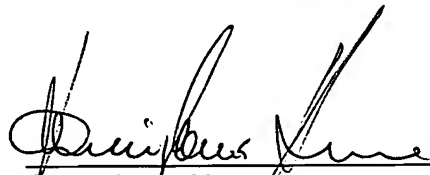
In accordance with 37 C.F.R. § 1.97(b), this Information Disclosure Statement is believed to be submitted prior to issuance of a first Office Action. Therefore, it is respectfully submitted that no fee is required for consideration of this information. However, in the event any fee is deemed necessary, the Commissioner is authorized to charge the undersigned's Deposit Account No. 50-0206.

Respectfully submitted,

HUNTON & WILLIAMS LLP

Dated: November 16, 2005

By:


Stanislaus Aksman
Registration No. 28,562

Hunton & Williams LLP
Intellectual Property Department
1900 K Street, N.W.
Suite 1200
Washington, DC 20006
(202) 955-1500 (telephone)
(202) 778-2201 (facsimile)
SA/sac

10/519,142

December 27, 2004

Henrik JENSEN et al.

TBA

TBA

55320.000401

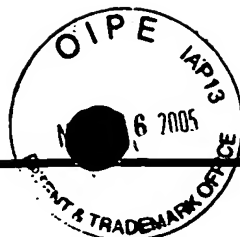
1 of 4

NOV 16 2005
PATENT & TRADEMARK OFFICE
U.S.

[illegible]

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Application Number	10/519,142
Filing Date	December 27, 2004
First Named Inventor	Henrik JENSEN et al.
Art Unit	TBA
Examiner Name	TBA

Sheet 2 of 4

Attorney Docket Number 55320.000401

FOREIGN PATENT DOCUMENTS

*Examiner Initial	Cite No.	FOREIGN PATENT DOCUMENT		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	TRANSLATION	
		Country Code Number-Kind Code (if known)					YES	NO
	15	WO	01/00530	01-04-2001	Duyvesteyn et al.		<input type="checkbox"/>	<input type="checkbox"/>
	16	WO	01/12555	02-22-2001	Duyvesteyn et al.		<input type="checkbox"/>	<input type="checkbox"/>
	17	WO	02/20396	03-14-2002	Spitler et al.		<input type="checkbox"/>	<input type="checkbox"/>
	18	WO	01/94276	12-13-2001	Tillotson et al.		<input type="checkbox"/>	<input type="checkbox"/>
	19	WO	01/70631	09-27-2001	Maier et al.		<input checked="" type="checkbox"/> Abstract	<input type="checkbox"/>
	20	CN	1 364 833	08-21-2002	Lian et al.		<input checked="" type="checkbox"/> Abstract	<input type="checkbox"/>
	21	CN	1 310 208	08-29-2001	Yu		<input checked="" type="checkbox"/> Abstract	<input type="checkbox"/>
	22	CN	1 386 708	12-25-2002	Ailin et al.		<input checked="" type="checkbox"/> Abstract	<input type="checkbox"/>
	23	JP	2001 104 797				<input type="checkbox"/>	<input type="checkbox"/>
	24	CN	1 401 575	03-12-2003	Hongde		<input checked="" type="checkbox"/> Abstract	<input type="checkbox"/>
	25	GB	663,845	12-30-1949			<input type="checkbox"/>	<input type="checkbox"/>
	26	EP	0 402 405	12-15-1993	Andersen		<input type="checkbox"/>	<input type="checkbox"/>
	27	WO	2004/001278	12-31-2003	Jensen et al.		<input type="checkbox"/>	<input type="checkbox"/>
	28	EP	1 157 741	11-28-2001	Murasawa et al.		<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>

EXAMINER SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Application Number	10/519,142
Filing Date	December 27, 2004
First Named Inventor	Henrik JENSEN et al.
Art Unit	TBA
Examiner Name	TBA
Attorney Docket Number	55320.000401

Sheet 3 of 4

OTHER DOCUMENTS - NON-PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published		
	29	Huisman, Carolien L. et al, "Preparation of a Nanostructured Composite of Titanium Dioxide and Polythiophene: New Routes Towards 3D Heterojunction Solar Cells", Laboratory for Inorganic Chemistry, Faculty of Applied Sciences, Delft University of Technology, Julianalaan 136, 2628 BL Delft, The Netherlands.		
	30	Kalaji, M., www.chemsoc.org, "Fifth International Conference on Materials Chemistry, Photoactive TiO2 nanostructured colloidal particles and thin films prepared by surfactant templating", chemsoc, Department of Chemistry, University of Wales Bangor, UK		
	31	www.businessinvestor.com, Altair Nanotechnologies, Inc.		
	32	Kemira, Reflections, Customer Newsletter 2-2001		
	33	Loy, Douglas A. et al, "Direct Formation of Aerogels by Sol-Gel Polymerizations of Alkoxysilanes in Supercritical Carbon Dioxide", Chem. Mater., 1997, Vol. 9, No. 11, 2264-2268		
	34	Kendall, Jonathan L. et al., "Polymerizations in Supercritical Carbon Dioxide," Chemical Reviews 1999, Vol. 99, No. 2, 543-563		
	35	Schaumburg, Kjeld, "Supercritical Solvents for Preparation of Nanoparticles, sustainable technologies for the synthesis and compounding of functional nanoparticles", University of Copenhagen		
	36	www.kemira.com/pigments, Kemira, Product Data sheet, Kemira An and Preliminary Data Sheet for AXX		
	37	www.kemira.com/pigments/titanium_in_brief/titanium.html, "Titanium and titanium dioxide in brief", Sulphate process; Chloride process; Main technical properties of TiO2 pigments		
	38	www.toto.co.jp/hydro_e/hydro_el.htm, "Super-hydrophilic photocatalyst and its applications", TOTO Ltd., Photocatalyst Business Division (7 pages)		
	39	www.kronosorders.com/khome.nsf, TiO2, Company History, History of our TiO2 products		
	40	www.bikek.com.tw/titanium.htm, "BikTek Bicycle Industrial Know How & Technology", Titanium Technical Services. Web Site.		

41	Paul D. Moran, John Bartlett, Graham A. Bowmaker, James L. Bolfrey, Ralph P. Cooney, "Formation of TiO_2 Sols, Gels and Nanopowders from Hydrolysis of $Ti(OPr)_4$ in AOT Reverse Micelles", Journal of Sol-Gel Science and Technology 15, 251-262, 1999	NOV 16 2005	U.S. PATENT & TRADEMARK OFFICE
42	B. D. Stojanovic, Z. V. Marinkovic, G. O. Brankovic and E. Fridancevska, "Evaluation of Kinetic Data for Crystallization of TiO_2 prepared by Hydrolysis Method", Jour. of Thermal Analysis and Calorimetry, Vol. 60, 595-604, 2000		
43	S. Yoda et al., "Adsorption and Photocatalytic Decomposition of Benzene Using Silica-Titania and Titania Aerogels: Effect of Supercritical Drying", Journal of Sol-Gel Science and Technology 22, 75-81, 2001		
44	E. Reverchon et al., "Synthesis of titanium hydroxide nanoparticles in supercritical carbon dioxide on the pilot scale", J. of Supercritical Fluids 00 (2002) 1-9		
45	Jennifer Jung and Michel Perrut, "Particle design using supercritical fluids: Literature and patent survey", Journal of Supercritical fluids 20 (2001) 179-219		
46	Y. Fukushima, "Application of Supercritical Fluids", R&D review of Toyota CRDL, Vol. 35, No. 1		
47	S. V. Manorama et al., "Photostabilization of dye on anatase titania nanoparticles polymer capping", Journal of Physics and Chemistry of Solids, 2002, Vol. 63, No. 1, 135-143		
48	Chhor, K. et al., "Syntheses of submicron TiO_2 powders in vapor, liquid and supercritical phases, a comparative study", Materials Chemistry and Physics, 32 (1992) 249-254		
49	G. D. Brown and J. J. Watkins, "Carbon Dioxide - Dilated Block Copolymer Templates for Nanostructured Materials", Mat. Res. Soc. Symp. Proc. Vol. 584, Materials Research Society 2000, pp 169-174		
50	F. Miyaji et al., "Transition Metal Oxide Tubes Synthesized by Using Ammonium Tartrate Crystal Template", Journal of the Ceramic Society of Japan, 109 [11] 924-928 (2001)		
51	N. Uekawa et al., "Low Temperature Synthesis and Characterization of Porous Anatase TiO_2 Nanoparticles", Journal of Colloid and interface Science 250, 285290 (2002)		
52	G. Beaucage and D. W. Schaefer, "Structural Studies of Complex Systems Using Small Angle Scattering: a unified Guinier/power law approach", Journal of Non-Crystalline Solids 172-174: 797-805 (1994)		
53	J. F. Porter et al., "The effect of calcination on the microstructural characteristics and photoreactivity of degussa P-25 TiO_2 ", J. Mat. Sci. 34: 1523-1531 (1999)		
54	O. Robbe et al., "Synthesis of Fine Ceramic Oxide Particles By The Sol-Gel Process in Supercritical CO_2 "		
55	Reddy et al., "Preparation, Characterization, and Spectral Studies on Nanocrystalline Anatase TiO_2 ", Journal of Solid State Chemistry, Vol. 158 Issue.2, 180-186 (2001)		
EXAMINER SIGNATURE		DATE CONSIDERED	
<p>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>			